Attorney Docket No.: 3968.094

PATENT

What is claimed is:

- 1. A coating composition comprising:
- (i) a compound according to formula (I)

$$(H_2C)_n$$
 X
 (I)

wherein:

n is an integer 1, 2, or 3;

X represents hydrogen or a straight or branched chain, substituted or unsubstituted alkyl or a straight or branched chain, substituted or unsubstituted alkenyl;

Y represents C=O or CR¹R², wherein each of R¹ and R² is independently selected from the group consisting of hydrogen, halogen, straight or branched chain, substituted or unsubstituted alkyl, straight or branched chain, substituted or unsubstituted alkenyl, OR^a, OC(O)R^a, C(O)OR^a, NR^aR^b, C(O)R^a, C(O)NR^aR^b, NR^aC(O)NR^bR^c, C(S)NR^aR^b, S(O)R^a, S(O)₂R^a, S(O)₂NR^aR^b, S(O)NR^a, and P(O)R^a;

R^a, R^b, and R^c are each independently selected from the group consisting of hydrogen and straight or branched chain, substituted or unsubstituted alkyl; and

Z is hydrogen or a straight or branched chain, substituted or unsubstituted alkyl, formula (I) including all isomeric forms of said compound; and

(ii) a film forming component selected from the group consisting of an unsaturated polymer resin, a vinyl ester based resin, a vinyl acetate based resin, a vinyl chloride based resin, a urethane based resin, and a mixture of a natural rosin and a vinyl chloride-vinyl acetate copolymer,

said compound being present in said composition in an amount effective to inhibit the attachment of biofouling organisms on a surface to which said composition is applied.

- 2. The composition of claim 1, wherein n is 2.
- 3. The composition of claim 2, wherein X is CH(CH₃)₂, Y is HC-OH, and Z is CH₃.
- 4. The composition of claim 1, wherein said compound is present in an amount from about 0.01 percent to about 50 percent by weight of said composition.
- 5. The composition of claim 4, wherein said compound is present in an amount from about 0.1 percent to about 10 percent by weight of said composition.
- 6. The composition of claim 1, wherein said compound according to formula (I) is covalently attached to said film forming agent.
- 7. The composition of claim 1, wherein said compound is selected from the group consisting of (-)-menthol, (-)trans-p-menthan-3,8-diol, (-)menthyl chloride, (-)menthone, menthoxypropanediol, and (-)isopulegol.
- 8. The composition of claim 7, wherein said compound is selected from the group consisting of (-)-menthol, (-)trans-p-menthan-3,8-diol, and (-)isopulegol.
- 9. The composition of claim 8, wherein said compound is (-)-menthol.
- 10. A paint comprising the composition of claim 1.

11. The paint of claim 10, which is formulated as a marine paint.

12. The composition of claim 1, wherein said compound is a compound of formula (IA)

wherein:

X' represents hydrogen or a straight or branched chain, substituted or unsubstituted lower alkyl or a straight or branched chain, substituted or unsubstituted lower alkenyl; and

Y represents C=O, HC-OR', or HC-Cl, R' being a radical selected from the group consisting of hydrogen and acyl, formula (IA) including all isomeric forms of said compound.

- 13. A non-toxic coating composition comprising an anti-fouling component consisting essentially of one of the compounds, (-)-menthol, (-)trans-p-menthan-3,8-diol, (-)isopulegol, (-)menthyl chloride, (-)menthone, and menthoxypropanediol, and at least one film forming component selected from the group consisting of an unsaturated polymer resin, a vinyl ester based resin, a vinyl acetate based resin, a vinyl chloride based resin, a urethane based resin, and a mixture of a natural rosin and a vinyl chloride-vinyl acetate copolymer.
- 14. The coating composition of claim 13, wherein said anti-fouling component consists essentially of one of the compounds, (-)-menthol, (-)trans-p-menthan-3,8-diol, (-)isopulegol, and (-)menthyl chloride.
- 15. The coating composition of claim 13, wherein said anti-fouling component consists essentially of one of the compounds, (-)-menthol, (-)trans-p-menthan-3,8-diol, (-)isopulegol, and

(-)menthone.

- 16. The coating composition of claim 13, wherein said anti-fouling component consists essentially of one of the compounds, (-)-menthol, (-)trans-p-menthan-3,8-diol, (-)isopulegol, and menthoxypropanediol.
- 17. The coating composition of claim 13, wherein said anti-fouling component consists essentially of one of the compounds, (-)-menthol, (-)trans-p-menthan-3,8-diol, and (-)isopulegol.
- 18. The coating composition of claim 17, wherein said anti-fouling component consists essentially of (-)-menthol.